203.5 - Differential Scanning Calorimetry and Differential Thermal Analysis

These SRMs are for calibration and validation of differential scanning calorimeters, differential thermal analyzers, and similar instruments.

Enthalpy and Temperature of Fusion

Technical Contact: donald archer@nist.gov

Enthalpy and Heat Capacity

Thermal Analysis Purity Set

SRM 1514 is for evaluating methods of determining purity by differential scanning calorimetry. It consists of pure phenacetin and phenacetin doped with p-aminobenzoic acid

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	2220	2225	2232	2234	2235
Description	DSC Enthalpy Tin	Mercury (Differential Scanning Calorimeters)	Indium DSC Calibration Standard - Temperature and Enthalpy of Fusion	Gallium for Thermal Analysis	Bismuth for Thermal Analysis
Unit Size	(each)	(2.5 g)	(1 g)	(approximately 2 g)	(1.5 g)
Melting Temperature (K)	505.08	234.30	156.5985°C	302.9146	544.556
Enthalpy of Fusion (J/g)	56.57	11.469	28.51	80.097	53.146

^{*} Certified for four levels of p-ABA (in mol %).